Figure B-6

Worksheet 2: Runoff Curve Number and Runoff

Worksheet 2 for Example 1

Project Hicory Hill By SEC Date 1-7-92

Location Marion County, WV Checked ROA Date 1-7-92

Circle one: (Present) Developed

1. Runoff curve number (CN)

Soil name and hydrologic group Exhibit B-2	Cover description (cover type, treatment, & hydrologic condition; percent impervious; unconnected/connected impervious area ratio)	CN 1/			Area ☐ acres ☐ mi² ☐ %	Product of CN x area
		T2/ A B L E B-1	T A B L E B-2	T A B L E B-3		
Culleoka B	Pasture, good condition			61	30	1830
Gilpin C	Pasture, good condition			74	70	5180
				Totals =	100	7010

1/ Use only one CN source per line.
2/ Modify by using Figure B-3 or B-4 as needed.

CN (weighted) = $\frac{\text{total product}}{\text{total area}} = \frac{7010}{100} = 70.1$, Use CN = 70

2. Runoff

	Storm #1	Storm #2	Storm #3
Frequency ..... yr	25		
Rainfall, P (24-hour) ..... in	4.63		
Runoff, Q ..... in	1.80		

(Use P and CN with fig. B-1, or eqs. B-3 and B-4.)

Figure B-7

Worksheet 2: Runoff Curve Number and Runoff

Worksheet 2 for Example 2

Project Hicory Hill By SEC Date 1-7-92

Location Marion County, WV Checked ROA Date 1-7-92

Circle one: Present (Developed) 175 Acres Residential

1. Runoff curve number (CN)

Soil name and hydrologic group Exhibit B-2	Cover description (cover type, treatment, & hydrologic condition; percent impervious; unconnected/connected impervious area ratio)	CN 1/ TABLE B-1	CN 1/ TABLE B-2	CN 1/ TABLE B-3	Area ☐ acres ☐ mi² ☐ %	Product of CN x area
Culleoka B	1/2 acre lots, good cond. 25% impervious	70			75	5250
Gilpin C	1/2 acre lots, good cond. 25% impervious	80			100	8000
Gilpin C	open space, good cond.	74			75	5550
				Totals =	250	18,880

1/ Use only one CN source per line.
2/ Modify by using Figure B-3 or B-4 as needed.

CN (weighted) = $\frac{\text{total product}}{\text{total area}} = \frac{18{,}880}{250} = 75.2$, Use CN = **75**

2. Runoff

	Storm #1	Storm #2	Storm #3
Frequency ..... yr	25		
Rainfall, P (24-hour) ..... in	4.63		
Runoff, Q ..... in	2.20		

(Use P and CN with fig. B-1, or eqs. B-3 and B-4.)

Figure B-8

Worksheet 2: Runoff Curve Number and Runoff

Worksheet 2 for Example 3

Project Hicory Hill By SEC Date 1-7-92

Location Marion County, WV Checked ROA Date 1-7-92

Circle one: Present (Developed)

1. Runoff curve number (CN)

Soil name and hydrologic group (Exhibit B-2)	Cover description (cover type, treatment, & hydrologic condition; percent impervious; unconnected/connected impervious area ratio)	CN 1/ T2/ TABLE B-1	CN 1/ TABLE B-2	CN 1/ TABLE B-3	Area ☐acres ☐mi² ☐%	Product of CN x area
Culleoka B	1/2 acre lots, good cond. 35% impervious	74			75	5550
Gilpin C	1/2 acre lots, good cond. 35% impervious	82			100	8200
Gilpin C	open space, good cond.	74			75	5550
				Totals =	250	19,300

1/ Use only one CN source per line.
2/ Modify by using Figure B-3 or B-4 as needed.

CN (weighted) = $\frac{\text{total product}}{\text{total area}} = \frac{19{,}300}{250} = 77.2$, Use CN = 77

2. Runoff

	Storm #1	Storm #2	Storm #3
Frequency ..... yr	25		
Rainfall, P (24-hour) ..... in	4.63		
Runoff, Q ..... in (Use P and CN with fig. B-1, or eqs. B-3 and B-4.)	2.35		

Figure B-9

Worksheet 2: Runoff Curve Number and Runoff

Worksheet 2 for Example 4

Project Hicory Hill By SEC Date 1-7-92

Location Marion County, WV Checked ROA Date 1-7-92

Circle one: Present (Developed)

1. Runoff curve number (CN)

Soil name and hydrologic group Exhibit B-2	Cover description (cover type, treatment, & hydrologic condition; percent impervious; unconnected/connected impervious area ratio)	CN 1/ T2/ TABLE B-1	CN 1/ TABLE B-2	CN 1/ TABLE B-3	Area ☐ acres ☐ mi² ☐ %	Product of CN x area
Culleoka B	1/2 acre lots, good cond. 25% impervious, connected	70			75	5250
Gilpin C	1/2 acre lots, good cond. 25% impervious, 50% uncon.	78			100	7800
Gilpin C	open space, good cond.	74			75	5550
				Totals =	250	18,600

1/ Use only one CN source per line.
2/ Modify by using Figure B-3 or B-4 as needed.

CN (weighted) = $\frac{\text{total product}}{\text{total area}} = \frac{18{,}600}{250} =$ 74.4, Use CN = **74**

2. Runoff

	Storm #1	Storm #2	Storm #3
Frequency ..... yr	25		
Rainfall, P (24-hour) ..... in	4.63		
Runoff, Q ..... in	2.10		

(Use P and CN with fig. B-1, or eqs. B-3 and B-4.)